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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,039	07/08/2003	Robindranath Banerjee	01-687/1D	3673
7590 10/14/2004				
LSI CORPORATION Intellectual Property Department MS D-106 1551 McCarthy Boulevard Milpitas, CA 95035			EXAMINER EASTHOM, KARL D	
			ART UNIT 2832	PAPER NUMBER
DATE MAILED: 10/14/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/615,039	BANERJEE, ROBINDRANATH	
	<b>Examiner</b>	<b>Art Unit</b>	
	Karl D Easthom	2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 16-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. ____.  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____.   | 6) <input type="checkbox"/> Other: ____.                                    |

Art Unit: 2832

1. Applicant's election without traverse of Group I, claims 1-15 in Paper No. 3 is acknowledged.
2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 16 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Wu et al.

Wu discloses the claimed invention at col. 4, lines 17-50 where the first and second polycrystalline resistor segments are disclosed as negative and positive and connected in series. The VSLI circuit disclosed at col. 1 meets claim 20.

4. Claims 16 is rejected under 35 U.S.C. 102(b) as being anticipated by Van Den Brock et al. Van Den Brock discloses the claimed invention at Fig. 4A with first and second segments 35, 36.

5. Claims 16 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Lowry et al. Lowry discloses the claimed invention at Figs. 10-12 with first and second segments 230A and 270, or 230A and 230B, having finite resistance as noted at pars. 44-45. The metal halide of claims 5-6 is 275

6. Claims 16-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Drabkin. Drabkin discloses the claimed invention at Figs. 3-4 and col. 7, lines 5-30, where two resistors are disclosed in series and equation 13 discloses the claimed  $R_1/R_2$  ratio, see also claims 11-12

Art Unit: 2832

of Drabkin for the series arrangement. Fig. 8 discloses the coefficient of about zero for claim 18.

7. Claims 16-18 and 20 are rejected under 35 U.S.C. 102(a,e) as being anticipated by Baldwin. Baldwin discloses the claimed invention at claims 1,3, where the resistor head is a second segment and the first segment is the semiconductor body, with coefficient about zero as noted by "offsetting" at claim 1, meeting claim 18. See claim 3 of Baldwin for claim 17. For claim 20, see the abstract of Baldwin.

8. Claim 16 is rejected under 35 U.S.C. 102(b) as being anticipated by Campbell. Campbell discloses the claimed invention at Fig. 4A with first resistor segment 36 and second segments 40. The desired coefficient of resistance is determined by the first and second coefficients where determined includes or means defined by or set by and the product is desired.

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell et al. in view of Chan et al. The claimed invention is disclosed as noted above, except the standard CMOS flow. Chan discloses creating SRAM resistors at col. 1, such as that of Campbell, as compatible with standard CMOS process flows at col. 2, so that it would have been obvious where the different processes are similar for the SRAM resistors. For example, in Campbell, the silicide regions are 36, with the unsilicided regions 40, and the resistor includes methods also

Art Unit: 2832


found in a standard CMOS process flow since the standard masking and doping, CVD, etc. at col. 4 are parts also of a CMOS flow.

11. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl D Easthom whose telephone number is 703 308-3306. The examiner can normally be reached on M-Th, 5:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on 703 308-7619. The fax phone numbers for the organization where this application or proceeding is assigned are 703 308-7722 for regular communications and 703 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308-0956.

  
Karl D Easthom  
Primary Examiner  
Art Unit 2832

KDE  
October 13, 2004